

by an adequate written description. The Examiner asserts that the specification defines the mobile communication equipment as being mounted in a vehicle, while the new claims encompass mobile communication equipment wherein the satellite transceiver is portable. This ground of rejection is respectfully traversed.

First, claims 19-26 do not require that the satellite transceiver be portable, but to the contrary simply do not require the satellite transceiver to be mountable in a vehicle. Claims 19-26 thus are fully supported by the written description in the specification as filed. As stated in the inventors' declaration, the invention is not limited to vehicle-mounted devices, but is equally applicable to devices that are provided in a stand-alone configuration.

Second, the specification does not describe a satellite transceiver mounted in a vehicle as asserted in the Office action, but rather describes a satellite transceiver that is mountable in a vehicle. Note col. 2, ll. 38-40; col. 3, ll. 30-32; col. 12, ¶ 8 ("transceiver unit 3 may be disposed within the interior of the vehicle M"). As understood in its ordinary meaning, a transceiver that is mountable in a vehicle is one that can be or is capable of being mounted in a vehicle, and does not exclude a stand alone or portable unit (which also are "mountable" in a vehicle).

Third, according to a third aspect of the invention as disclosed at column 4 of the patent, a plurality of communication

terminals are provided wherein a first group of the terminal equipment has a function of a satellite wireless mobile station. This aspect of the invention as originally disclosed clearly is not dependent upon being mounted in a vehicle.

Fourth, one of the stated objectives of the invention is to reduce the size of the satellite transceiver, which one of ordinary skill in the art would recognize as not being limited to a transceiver mounted in a vehicle.

For all of the foregoing reasons, claims 19-26 are submitted to be completely supported by the original written description in the specification as filed, and withdrawal of this ground of rejection is requested.

35 U.S.C. § 103 Rejection

Claims 19-26 are further rejected as being unpatentable over Wiedeman in view of Japanese Laid-Open Patent Publication 4-123534 (cited in the IDS filed July 22, 1999, but an initialed copy of Form PTO-1449 was not included with the Office action). This rejection also is traversed.

As previously explained, Wiedeman discloses an integrated terrestrial cellular/satellite communication system, wherein cellular satellite telephones 501 (see Fig. 4) include a cellular telephone 503 with associated antenna 505 for communicating with a terrestrial cellular telephone system 102, and also include a satellite control unit 531 with associated RF converter 521 and

antenna 523 for communicating with a communication satellite (301, 302) of a satellite communication system. Wiedeman discloses that the cellular satellite telephone communicates with the satellite system when the user notifies the system that the user desires to be placed in a database of roaming users and that the user will be exiting the service area of a terrestrial system (see col. 6, ll. 6-14).

The Office action asserts that it would have been obvious to apply the "portable unit communication technique" allegedly disclosed in the '534 reference to the system of Wiedeman "for the purpose of allowing the phone to be more compact when only communicating with a particular local system."

Initially, the '534 reference does not anywhere disclose or mention any "local area terrestrial transceiver 301, 303" as alleged in the Office action at page 4. Such a system appears to be described in the Crane reference applied in the first Office action. To the extent that the Examiner has withdrawn the prior rejection of the claims over the Crane reference, this ground of rejection is traversed.

However, to the extent the rejection does rely on the '534 reference, Fig. 5 of that reference shows a communication device having a disconnectable portable set. The individual mover 102 includes a terrestrial mover section and the basic mover 100

includes a combination of a satellite mover section and a controller. The basic mover or a telephone 154 is described as being connected to the connection connector 122 of the individual mover 102 (see page 8, ll. 11-15). When the individual mover 102 is attached to the basic mover 100, either terrestrial or satellite communication can be selected. When individual mover 102 is disconnected from basic mover 100, only satellite communication can be used. In this case, terrestrial communication is possible by connecting telephone set 154 to the disconnected individual mover 102.

In the '534 reference, the switch for switching between the terrestrial and satellite system is provided on the satellite side. Satellite communication is carried out with a satellite located at an altitude of greater than 1000 km, while terrestrial communication is carried out with a base station usually located only a few kilometers away from the mobile equipment. Satellite communication thus requires greater transmission power and a larger antenna, which inevitably increases the size of the device. According to the present invention, the input/output circuit and the switching means are provided on the terrestrial side of the system, which reduces the size of the satellite device side of the system.

Further, if terrestrial communication is desired after the individual mover 102 is disconnected, the telephone set 154 must be reconnected to the individual mover 102. In contrast, according to the claimed invention of the present application, the signal input/output circuit is provided on the terrestrial side and does not require reconnection when terrestrial communication is desired. The present invention provides a convenient structure that is reduced in size and can be easily used to communicate using a terrestrial system by disconnecting the terrestrial side of the system where terrestrial communication is possible. The '534 device, on the other hand, fails to provide such a feature since it includes signal input/output circuitry and switching connected to the satellite side of the system. In this regard, the claimed invention provides a significant improvement to the prior art, that is not disclosed or even recognized in the '534 reference; and as such, even if the '534 reference were to be combined with Wiedeman, the resultant device still would fail to have the signal input/output and connection controller features set forth in the present claims.

Moreover, as previously explained, one of ordinary skill in the art would not have attempted to modify the wireless satellite cellular telephone of Wiedeman to make the terrestrial cellular

telephone disconnectable from the satellite transceiver, since the Wiedeman system is intended to be used as a roaming system for a terrestrial cellular user who travels into an area not served by any terrestrial system. In other words, the user of the Wiedeman system is a terrestrial communication system subscriber. Thus, if the cellular telephone were disconnected from the satellite control unit, the entire purpose of the Wiedeman system would be defeated. This fact precludes such a modification from being obvious within the meaning of 35 U.S.C. § 103. The outstanding Office action has failed to respond to this point of argument (which does not depend on which piece of prior art is attempted to be combined with Wiedeman and thus remains applicable).

In view of the foregoing, claims 19-26 are respectfully submitted to define subject matter that is patentable over the prior art of record, whether considered individually or in combination. Withdrawal of the outstanding grounds of rejection and the issuance of a Notice of Allowance are earnestly solicited.

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Respectfully submitted,

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